



The seventy-seventh meeting of the Society was held on the evening of August 21, 1920, in the Board Room of the Mechanics' Institute, 57 Post Street, San Francisco, California.

President Van Dyke in the chair.

Minutes of the preceding meeting were read and approved.

The following nine members responded to roll-call: Dr. E. C. Van Dyke, Dr. F. E. Blaisdell, J. C. Huguenin, Chas. L. Fox, Dr. J. F. Killeen, E. P. Van Duzee, E. R. Leach, Grant V. Wallace, and G. F. Ferris.

Two guests were present: Mrs. E. P. Van Duzee and Mrs. F. E. Blaisdell.

The reading of the Treasurer's report was followed by the reading of the minutes of the meeting of the Society held in conjunction with the Pacific Coast Division of the A. A. A. S. at Seattle, Washington, on June 18, 1920. (Vide infra.)

President Van Dyke spoke regarding the Seattle meeting and stated that the next meeting would probably be held near San Francisco.

Under communications the Secretary read a request from Master Wolfgang Mautz, asking that his name be dropped from the membership-roll as he expected to go to Europe in the near future.

Mr. Van Duzee then proposed the following persons for membership in the Society: R. K. Vickery, Prof. Trevor Kincaid, Prof. A. L. Melander, F. H. Lathrop, Arthur Frank, E. J. Newcomer, C. J. De Vise, Anthono Spuler, A. J. Basinger; and also the name of Dr. Louise V. Rupe, proposed by Dr. Killeen at the Seattle meeting. The proposals were seconded by Dr. Van Dyke, and in accordance with previous custom their election was declared unanimous.

Mr. Leach followed with remarks on his visit to the Santa Cruz Mountains in April, to Trinity County in May, to Eureka, Mendocino County, where it was raining, and late in May a trip to Placer and Nevada Counties, at an elevation of 4500 feet. Collecting was good. He said in part: "On December 9, 1918, in the extreme southwest corner of Trinity County, California, at the site of an old shakemakers camp, I picked up eight specimens of a species of *Meloe*, from under old boards and rubbish. Having taken a few of this species under similar conditions on a previous occasion I decided to visit the site of another abandoned camp about a mile distant. At the second camp 27 specimens were obtained from an area of not more than 30 feet radius."

"On January 8, 1919, I visited the two camps and col-

lected 23 specimens, most of them at the second camp previously mentioned. At this time I noticed that the specimens killed in alcohol preserved their shape on drying very much better than did those killed in cyanide. I again visited the place on November, 1919, finding nothing at the first camp but taking 44 specimens at the second; these had apparently just emerged as the abdomens were very small and the whole insect was of a brownish color as yet, not having acquired their jet black color."

"On January 7, 1920, the camps were again inspected. No beetles were seen at the first, but 137 fully matured specimens were counted at the second camp and all in an area not to exceed fifty or sixty feet in diameter. I took 25 specimens in alcohol, 11 alive, and left the others, 101, to their own devices. Those taken alive proved to be nocturnal in their habits, lying dormant during the day and roaming about to feed at night. They devoured grass and weeds of almost every kind but refused tree leaves of various kinds that were offered them. About February 1, three small masses of orange-colored eggs, each egg about one millimeter in length, were found in the cage, but whether deposited by one or more females, I do not know. These eggs failed to hatch and by February 15, all the beetles had died. This *Meloe* apparently exists in the mature condition only during our coldest weather and becomes active only during the coldest part of the day."

Mr. Wallace stated that in June a specimen of a *Meloe* had been picked up on the beach at Pescadero.

Dr. Killeen discussed his visit to the Seattle meeting of the Pacific Coast Division of the A. A. S., and the results of collecting about Seattle, Puyallup and Portland; it rained much of the time, but he had a few pleasant days.

Mr. Huguenin said that he had visited Fairfax and Bear Valley, Marin County, and took a number of *Parnassus clodius*, an alpine butterfly, near the ocean at about one hundred feet elevation, three miles from the shore.

Dr. Blaisdell reported that his studies on the genus *Listrus*, a Melyrid group of beetles, had resulted in describing about twenty new species with a complete synoptic table of the fifty-three known species. This study began in 1890, at San Diego; since that time continual effort had been made to get a large amount of material together from the Pacific Coast. Friends had contributed liberally, namely: Mr. Chas. Liebeck of Philadelphia, F. W. Nunenmacher, Chas. L. Fox and Dr. A. Fenyes. This work, with other miscellaneous studies, has been submitted to the California Academy of Sciences for publication.



Dr. Van Dyke reported his trip to the meeting of the Pacific Coast Division of the A. A. A. S. at Seattle. Mr. Van Duzee followed with a similar report; he had acted as secretary pro tempore, and the minutes were read earlier in the evening. (Vide supra et infra.)

A number of exhibits were made and after considerable discussion the meeting adjourned.

F. E. BLAISDELL, Secretary.

The seventy-eighth meeting of the Society was held on the evening of December 4, 1920, in the Board Room of the Mechanics' Institute, 57 Post Street, San Francisco.

President Van Dyke in the chair.

Minutes of the preceding meeting were read and approved.

The following ten members answered to roll-call: Dr. E. C. Van Dyke, Mrs. E. C. Van Dyke, F. W. Nunenmacher, Chas. L. Fox, Dr. F. E. Blaisdell, Wm. F. Breeze, J. O. Martin, E. P. Van Duzee, Grant Wallace, and G. F. Ferris.

Twelve guests were in attendance: Mrs. F. E. Blaisdell, Mrs. E. P. Van Duzee, Mr. K. Kannan, Henry Good, Sadie E. Keen, Dr. Isabel McCracken, Josephine Nunenmacher, Clifford S. Dodds, Harold M. Jeancon, Everett E. Wehr, J. C. Chamberlin, and Carl D. Duncan.

After reading of the Treasurer's report, a communication was read from Mr. R. F. Sternitzky, who had just returned from Idaho.

Under new members, Dr. Blaisdell proposed Dr. McCracken for membership in the Society. This was followed by the proposal of Mr. Carl Duncan, Sadie E. Keen and Mr. J. C. Chamberlin for membership as well. The proposals were seconded by Dr. Van Dyke. It was suggested that the elections be made unanimous. So ordered and carried.

Under lectures and papers for the evening, Dr. Van Dyke spoke about *Embia californica* Banks, which belongs to the family Embidae, closely related to the termites. The tarsi are dilated and used for spinning. The Doctor then gave an interesting talk on the species of beetles belonging to the genus *Nebria*.

Mr. Everett Wehr being called upon said that he was connected with the U. S. Agricultural Department of Washington, D. C., and that he was studying the bot flies. Has also been working with the Tabanidae. This latter family contains somewhere between 2500 to 3000 described species; these are distributed through thirty-five to forty genera. None are found in Hawaii. Species of the genus *Tabanus* outnumber all the others. *Chrysops* follows next in the number of species.

Mr. Nunenmacher discussed the difficulty of getting his Pacific Coast material named up.

Mr. Martin talked about the species of insects that live in ants' nests.



Dr. McCracken responded to an invitation by talking on the subject of gall insects, as follows:

"Gall insects interest equally the botanist and entomologist inasmuch as the gall which develops about the growing young larva is a plant growth—an abnormal development of the plant tissue, which is in an undifferentiated state and in which the adult female deposits its eggs. The stimulus to the plant is provided by the larva and is thought to be an excretory product.

The plants infested are few, mainly the oaks, wild roses and a few others. Gall insects and their galls may develop very rapidly, the perfect insect emerging within a few weeks from the time the gall first makes its appearance. This in general is the history of the spring galls. Or the galls and gall insects may develop very slowly, the larval stage of the insect lasting for months. This in general is the history of the fall and winter galls.

In some cases the galls remain on the trees until after the adult insects emerge, in which case the insects usually emerge in the fall. In other cases the galls drop to the ground before the insects emerge, the insects remaining in them either as larvae or pupae until late winter or early spring, according to the season. Certain galls are monothalms, one insect only developing in each; other galls are polythalous, several insects developing in each gall.

Some gall insect species appear exclusively in the female sex, others appear in both male and female sexes. In a few cases there is known to be an alternation of generations, the fall agamic generation giving place to a spring sexual generation. In no Californian species is this relationship certainly known. In addition to true gall-makers, there are certain Cynipid species which are inquilines or guests, ovipositing within the galls of the gall-makers, their larvae, like those of the latter, having the ability to stimulate a nutritive layer of tissue within the gall, upon which they feed, without interfering with the life of the host."

Mr. Nunenmacher during the discussion mentioned some interesting facts in relation to galls.

Dr. Van Dyke spoke on the dilated tarsi of certain Brazilian coleoptera.

Among the interesting exhibits were specimens of *Embia californica* Banks. These were shown by Dr. Van Dyke.

After considerable discussion the meeting adjourned.

F. E. BLAISDELL, Secretary.

The seventy-ninth meeting of the Society was held in the Board Room of the Mechanics' Institute, on Saturday evening of May 22, 1921.

President Van Dyke in the chair.

Minutes of the preceding meeting were read and approved.

Eleven members were in attendance: Dr. E. C. Van Dyke, J. C. Huguenin, Chas. L. Fox, Wm. F. Breeze, J. D. Graves, Dr. I. McCracken, Grant Wallace, Carl D. Duncan, G. F. Ferris, F. W. Nunenmacher, and Dr. F. E. Blaisdell.

Four guests were present: Mrs. E. P. Van Duzée, Mrs. Grant Wallace, Mrs. F. E. Blaisdell, and C. L. Dodds.

Under communications Dr. Blaisdell stated that he had, in accordance with instructions from the Society, sent out the Proceedings of the Society as far as published to the following institutions and societies: California Academy of Sciences, University of California, Stanford University, Museum of Comparative Zoology at Cambridge, Department of Entomology, Cornell University, Brooklyn Entomological Society, American Entomological Society, Entomological Society of Ontario, Deutsche Entomologische Museum, Berlin; Bussey Institute. Acknowledgments had been received from most of them.

President Van Dyke then gave the tentative announcement of the prospective meeting of the Pacific Coast Division of the American Association of Economic Entomologists, in conjunction with the Pacific Coast Entomological Society. Stating that members of the Society are expected to attend an entomological dinner on August 5, the meeting on August 6, and on August 7; a field-day excursion under guidance of Prof. Van Dyke, who also requested that all of the members who could conveniently do so, plan exhibits for the meeting on August 6.

Mr. Nunenmacher stated that he would have a fine collection of Coccinellidae ready for exhibition.

Mr. Fox being called upon, exhibited two species of butterflies endemic to Hawaii, A *Vanessa* and a *Lycaena*, with the following remarks: "I am showing two indigenous species of Hawaiian butterflies—two specimens of *Vanessa tammeamea* Esch.—named after a celebrated Hawaiian king who brought all Islands of the group under one sovereignty. The species is fairly common in the lower forest zones of the mountains. According to Meyrick in the "Fauna Hawaiiensis" it is an intermediate form between *Vanessa cardui*, and *Vanessa callirrhoe* found in the Canary Islands. The specimen of *Lycaena blackburni* Tuely shows a species found in the mountains; the larvae feeding on the leaves of the Koa tree (*Acacia koa*).



Meyrick places this species in the group of *Lycaena argiolus* of Europe and northern Asia."

"The above notes have been repeated from the Southwest Science Bulletin of May 5, 1920. Article by Charles F. Mant, Hawaiian Entomological Society."

Dr. Van Dyke stated that there were species of *Scymnus* indigenous to the Islands. The Fauna Hawaiiensis lists three species,—*Scymnus discedens* Sharp, *ocellatus* Sharp, and *vividus* Sharp.

Mr. Graves exhibited a specimen of *Papilio daunus* Boisd. taken in Chico, California, a species usually found only at higher altitudes, according to Dr. Van Dyke, and a sphinx (*Arctonotus lucidus*) taken on January 30, at Berkeley, California.

Mr. Nunenmacher stated that he had taken this sphinx in Oakland.

Dr. McCracken of Stanford University gave an account of Embids taken on the University campus as follows: "The first Embid seen in this vicinity was taken in May, 1920, a wingless female running across a gravelled path. In October, and from then on, wingless females were found continuously as we discovered where to look for them—about the base of certain cypress and pepper trees and under stones in rock piles. They are found abundantly around a certain nursery in Palo Alto, in certain of the gardens and around the University buildings where shrubbery has been planted. They have not been found except in such places and hence we judge have been introduced, and that quite recently, with garden stock. No males have as yet been seen, but it is expected that they will appear before long." Certain facts regarding the willow beetles of the genus *Lina* (*L. scripta*) and its varieties were also mentioned.

Mr. Wallace showed a new species and probably a new genus of longicorn beetle, taken in Marin County, California.

Mr. Huguenin reported collecting at Fairfax, Marin County, California, and exhibited a moth that frequented the lupines there.

Mr. Ferris spoke on a group of Aphids.

Dr. Blaisdell stated that his paper on "New Species of Melyridae, Chrysomelidae and Tenebrionidae (Coleoptera), previously presented to the California Academy of Sciences for publication and held over on account of the high cost of printing, had been recalled and submitted to Stanford University for earlier printing.

After discussion the meeting adjourned.

F. E. BLAISDELL, Secretary.

The eightieth meeting of the Society, or Annual Field Day, was held in Fairfax Canyon, Marin County, California, on Sunday, May 22, 1921.

Five members participated in the outing: James E. Cottle, F. W. Nunenmacher, Charles L. Fox, William F. Breeze, and Dr. F. E. Blaisdell.

Nine guests enjoyed the outing: Mrs. J. E. Cottle, Mrs. F. E. Blaisdell, Helen Sanford, Ella Nunenmacher, Josephine Nunenmacher, Theresa Nunenmacher, Mr. and Mrs. Kenny and infant daughter.

The weather was grand and everyone enjoyed the day to the fullest extent; collecting was quite good but not up to the usual standard on account of the general coldness of the season.

Dr. Blaisdell secured a fine pair of *Synaphoeta gueri* Lec. One of these, a female, was found resting on the trunk of a partially dead buckeye (*Aesculus californicus* Nutt.); besides, a small series of *Eleodes dentipes* var. *marinae* Blais., *Omus californicus*, *Lina scripta*, an entirely blue phase, *Pterostichus vicinus*, *Acmaeops militaris*, *Toxotus vestitus* and *flavolineatus*, *Malachius horni*, *Melanotus oregonensis*, *Cryptocephalus nigerimus*, *Dermestes medialis*, *Cremastochilus* sp., Telephorids, Aleocharinids and a number of common species.

Mr. Nunenmacher's best catch for the day was a specimen of *Pogonocherus californicus*.

Mr. Fox was diligent in collecting Hymenoptera, while Mr. Breeze and Mr. Cottle gave their attention to the Lepidoptera.

It was noted with regret that many of the live oaks were dying from the ravages of the larvae of *Phryganidia Californica*. The wild gooseberries were not as thrifty as in former seasons and many plants of yerba buena (*Erioduction glutinosum*) were in a great part dead or of low vitality and no *Trirhabda diducta* (Coleoptera) was to be found upon them in that vicinity. The water of the large creek has been diverted at a point farther up the canyon, and as a result the usual good creek collecting was lacking. This locality is one where *Bembidion rickseckeri* has been taken in former seasons.

F. E. BLAISDELL, Secretary.



SPECIAL MEETING OF THE PACIFIC COAST  
ENTOMOLOGICAL SOCIETY

(Held in conjunction with the Pacific Division, A. A. A. S.)  
Meeting of June 18, 1920

Meeting called to order at two o'clock, in the Zoological Laboratory of the University of Washington at Seattle, Washington.

Dr. Edwin C. Van Dyke, president, in the chair.

Members present: Dr. E. C. Van Dyke, Mr. E. P. Van Duzee, Dr. J. F. Killeen.

Visitors present: Prof. Trevor Kincaid, Prof. A. L. Melander, F. H. Lathrop, E. J. Newcomer, R. A. Vickery, C. J. Da Vise, Max M. Reeher, Anthono Spuler, A. E. Burrell and others.

Mr. Van Duzee was asked to act as secretay *pro tempore*.

In opening the meeting Dr. Van Dyke spoke of the aims of the Society and its recent affiliation with the Pacific Division of the American Association for the Advancement of Science.

Prof. Melander asked regarding the efforts that had been made recently looking toward the establishment of an entomological periodical by this Society and of the outlook for such a publication in the future.

Mr. Van Duzee then read a paper on "Some Problems of the Systematic Entomologist" in which he spoke of the necessity for the formation of large collections of correctly determined insects and of the value of such systematic collections to the economic entomologist on whom devolves the task of protecting the food supply of the human race from devastation by insect pests. Among the problems mentioned was the avoidance of the continual change in the insect names by the stabilization of entomological nomenclature and he suggested the appointment of a committee of entomologists whose duty it should be to give us a validated bibliography of entomology, and to settle disputed points in nomenclature. Such a committee should work in harmony with the International Committee on Zoological Nomenclature. He deplored the tendency of certain students of restricted subjects to raise the value of all categories in entomological nomenclature, calling the suborder an order, the subfamily a family, etc., as nothing could be gained by such a shifting of terms while great inconvenience would be caused to the general worker in entomology. He also criticized the now too prevalent custom of giving names to mere *individual variations*, a custom springing from the

habit of observing differences only and *ignoring resemblances* and called attention to the fact that the philosophic foundation of our science rests on the study of resemblances as well as differences and that only confusion could result from giving undue weight to the latter. The paper was discussed by Prof. Melander and Dr. Van Dyke.

Dr. Van Dyke then read a paper entitled "The Inter-Tidal and Beach Colepteroous Fauna of Western North America, With Remarks Upon its Peculiarities and Probable Origin." In this paper Dr. Van Dyke stated that the seashore area was composed of several distinctive zones, the outermost being the inter-tidal which was rocky in some places and sandy in others. Within this was found the dry beach and beyond it, in many parts of the coast, a sand dune area. Among the rocks of the inter-tidal zone were to be found such Coleoptera as Carabidæ, Hydrophilidæ, Staphylinidæ, Malachidæ, and Eurystethidæ (*Ægialitidæ*), and they were peculiar in being generally wingless, and as in the case of the Staphylinidæ, very hairy as well as more or less flattened, characteristics which were no doubt gradually acquired as they became adapted to their peculiar environments. The sand dwelling inter-tidal species were of the families Carabidæ, Staphylinidæ, Heteroceridæ and Parnidæ, and were in the main wingless like those found among the rocks, but cylindrical instead of flat, and otherwise were fitted for burrowing. The fauna of the dry beach zone was listed as being much richer than that found in the inter-tidal area and generally less specialized, though including many species which were absolutely restricted to it. The species mentioned were mainly predaceous or scavengers and were of the following families: Cicindelidæ, Carabidæ, Staphylinidæ, Malachidæ, Silphidæ, Hydrophilidæ, Monotomidæ, Anthicidæ, Tenebrionidæ, Oedemeridæ and Curculionidæ.

The general peculiarities of the seacoast-dwelling Coleoptera such as their loss of wings, loss of color, hairiness and so forth, were also discussed from the standpoint of their probable origin.

The paper was discussed by several of those present.

Dr. Killeen proposed for membership the name of Dr. Louise V. Rupe, San Francisco; seconded by Dr. Van Dyke, to be voted on at the next regular meeting of the Society.

Prof. Melander called attention to an interesting experience he had had in breeding species of the dipterous genus *Leucopsis* from scale insects found on the grass culms.

Mr. Lathrop spoke of his work on the homopterous family



Cicadellidæ, stating that the genera *Idiocerus* and *Thamnotettix* were dominant in the western and northwestern States, *Chlorotettix* in the southeastern States and *Cicadella* in the South, the insects of the latter family usually being found along streams where the vegetation is rank. He said the true *Empoasca mali* was eastern and was not found in the West where *Empoasca unicolor* takes its place, and that the various species of *Idiocerus* seemed to be single brooded in the West.

Mr. Kerr told of the occurrence of *Hippodamia lecontei* in the Okanagan Valley, of *H. convergens* in the coast region of Oregon and of *H. spuria* and *ambigua* in western Oregon. He had also taken *Coccinella trifasciata subversa* in Oregon.

Prof. Kincaid spoke of the entomological work being done at the University of Washington, calling attention especially to the fine collection founded by Prof. O. B. Johnson which had been acquired by the University.

Dr. Killeen moved a vote of thanks to the University of Washington authorities for the courtesies extended to the Pacific Coast Entomological Society; seconded by Prof. Melander and carried. The meeting then adjourned.

E. P. VAN DUZEE, Secretary *pro tempore*.

SPECIAL MEETING OF THE PACIFIC COAST  
ENTOMOLOGICAL SOCIETY

(Held in conjunction with the Fifth Annual Meeting  
of the Pacific Division of the A. A. A. S.)

Meeting of August 6, 1921

Pacific Coast Entomological Society meeting held in the Auditorium of the California Academy of Sciences, was called to order at 10 o'clock.

President Van Dyke in the chair, stated that the usual formal business of the Society would be dispensed with; and after an address of welcome to the visiting members and visitors, the reading of papers was begun.

The following addresses and papers were listened to with much attention and interest:

"A Comparison of the Entomological Faunas of the Cascades and Sierra Nevadas," by Edwin C. Van Dyke of the University of California.

"The Lepidoptera of Southern California," by W. S. Wright of San Diego, California.

"Insect Immigrants," by E. O. Essig of the University of California.

"Remarks Upon the Tenebrionid Fauna of California and Adjacent Territories," by Frank E. Blaisdell of Stanford University.

"Some Remarks Upon the Ecology of Aphids," by F. H. Lathrop, of the Oregon Agricultural College.

"Notes Upon the Insect Fauna and Conditions of the Islands of the Gulf of California," by E. P. Van Duzee of the California Academy of Sciences.

"Notes on the Biology of the Species of *Desmocerus*," by H. E. Burk, in service of the U. S. Department of Agriculture.

"Remarks on the Cotton Ball Weevil in Mexico," by Dr. A. W. Morrow, Consulting Entomologist.

"Remarks on the Effects of Insecticides, Especially the Dangers of Arsenic," by Dr. W. D. Pierce, of San Mateo, California.

After the meeting lunch was served in the Academy by ladies of the Society for the benefit of the members and guests.

In the afternoon the members and guests viewed the collections of the Entomological Department of the California Academy of Sciences.

Dr. Blaisdell exhibited his collection of the species of the



Tenebrionid genus *Blapstinus* and species of the Robusta Group of the genus *Coniontis*.

The following members and guests were present: Dr. E. C. Van Dyke, E. P. Van Duzee, E. O. Essig, Dr. F. E. Blaisdell, W. S. Wright, Dr. J. F. Killeen, Dr. Louise Killeen, F. H. Lathrop. Guests: V. M. Tanner, H. E. Burke, W. D. Pierce, Barton W. Everman, W. B. Herms, S. B. Freeborn, Mrs. H. E. Ricksecker.

F. E. BLAISDELL, Secretary.







